

## Case 3304

***Oceania* Péron & Lesueur, 1810 (Cnidaria, Hydrozoa): proposed conservation of usage by the designation of *Oceania armata* Kölliker, 1853 as the type species**

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**Abstract.** The purpose of this application, under Articles 78.2.3 and 81.1 of the Code, is to conserve the usage of the hydrozoan name *Oceania* Péron & Lesueur, 1810 by validating a previous but invalid designation by Mayer (1910) of *Oceania armata* Kölliker, 1853 as the type species. Previous considerations of the nominal genus by Forbes (1848) and Agassiz (1862) based on suggested nominal species were invalid under Article 67 of the Code. During the last 150 years the genus *Oceania* has been used exclusively in the sense of Mayer (1910).

**Keywords.** Nomenclature; taxonomy; Cnidaria; Hydrozoa; *Oceania*; *Oceania armata*; hydromedusae.

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1. In a work on all species of medusae then known, Péron & Lesueur (1810, p. 343) established the genus-group name *Oceania* and assigned to it 14 nominal species of hydromedusae. They did not designate a type species for this new nominal genus. Plates intended to accompany the text were not included as part of the report and most of them were published for the first time only quite recently (Goy, 1995). Many of the nominal species listed under *Oceania* by Péron & Lesueur were therefore of questionable identity to early authors. Species currently recognizable among those originally included in *Oceania* have been assigned to several different families and orders of Hydrozoa (Goy, 1995).

2. Eschscholtz (1829, p. 96) established the name OCEANIDAE for the genus *Oceania* and six other genera, which are classified in several orders.

3. Lesson (1843) employed the generic name *Oceania* in a more restricted sense to accommodate species of leptomedusae (order Leptothecata) that are currently assigned mostly to the genus *Clytia* Lamouroux, 1812 (see Cornelius, 1982). Lesson did not designate a type species for the genus *Oceania*. Forbes (1848), in contrast to Lesson (1843) who referred leptomedusae to *Oceania*, referred several species of anthomedusae (order Anthoathecata) to the nominal genus.

4. Forbes (1848, p. 26) also made an ambiguous type species designation. He stated that 'the term *Oceania* has been so often and generally applied to *Medusa pileata* of Forskål, and similar forms, that I think it best to restrict it to that group. Peron, who first founded the genus, included them within it, though it is doubtful whether he would have regarded the Forskalian species as the type'. Whether Forbes's statement can be taken as a valid type species designation of *Oceania* is arguable on grounds that it can be considered ambiguous under Article 67.5.1 and 67.5.3 of the Code.

*Medusa pileata* Forskål, 1775 is a well-known species and has been repeatedly cited as *Neoturris pileata* during the last 85 years. Forbes's use of the name *Oceania* was adopted by Kölliker (1853, p. 323) in describing the new species of anthoathecate medusa *Oceania armata* and by Gegenbaur (1856) in constructing a systematic account of the medusae.

5. Agassiz (1862, p. 346, footnote 2) reverted to Lesson's (1843) concept of *Oceania* and attempted to more precisely define the genus. In referring to a group of species now allocated to several families, he stated that 'I see, however, no reason why the name Nucleiferae, which he [Lesson] proposed for the old Forskalian type, should not be retained for this family, and the name *Oceania* and Oceanidae applied specifically, as Lesson has done, to *Oceania phosphorica*, which Péron & LeSueur placed in the first section of the genus. This corresponds to the genus *Thaumantias* of modern writers'. Whether Agassiz's statement can be taken as a valid type species designation of *Oceania* is also arguable on grounds that it could be considered to be ambiguous (see Articles 67.5.1 and 67.5.3). In an accompanying taxonomic overview, Agassiz (1862) employed the genus *Oceania* in nearly the same sense that *Clytia* is used today. The name *Oceania phosphorica* Péron & Lesueur, 1810, which Agassiz regarded as a typical member of *Oceania*, is now considered a probable synonym of *Clytia hemisphaerica* (Linnaeus, 1767), a possibility acknowledged by Péron & Lesueur (see Goy, 1995). In turn, *Clytia hemisphaerica* is generally regarded as a senior synonym of *Campanularia johnstoni* Alder, 1856, type species of *Clytia* Lamouroux, 1812 by designation under the plenary power (Opinion 1345).

6. Haeckel (1879) rejected the name Nucleiferae Lesson, 1843 as a disparate assemblage and the name never gained acceptance. The family name OCEANIDAE in the sense that includes *Oceania armata* Kölliker, 1853 continued to be used (e.g. Gegenbaur, 1856; Vanhöffen, 1891; Mayer, 1910; Picard, 1958; Schuchert, 2004). Future usage of the family-group name OCEANIDAE depends on a valid type-species designation for the genus *Oceania*.

7. In a comprehensive monograph on medusae of the world, Mayer (1910, p. 147) sought to resolve nomenclatural confusion surrounding *Oceania* and to stabilize usage by designating *Oceania armata* Kölliker, 1853 as its type species. All subsequent authors, including Kramp (1959, 1961, 1968) in a series of influential works on medusae, used *Oceania* as defined by Mayer (1910). However, Mayer's type species designation is invalid, as noted by Calder (1988), because *O. armata* was not one of the species originally included in *Oceania* (see Article 69.1).

8. *Oceania* has been retained almost exclusively since 1910 for *Oceania armata*, a circumglobal species that is well-known and has often been mentioned in the literature over the last 150 years (e.g. Gegenbaur, 1854; Metschnikoff, 1886; Mayer, 1910; Ranson, 1925; Uchida, 1927; Kramp, 1959, 1961, 1965, 1968; Brinckmann-Voss, 1970; Trégouboff & Rose, 1957; Bouillon, 1985; Bleeker & van der Spoel, 1988; Boero & Bouillon, 1993; Bouillon, 1995; Schuchert, 1996; Bouillon & Boero, 2000; Schuchert, 2004). Currently (Bouillon & Boero, 2000), the genus *Oceania* comprises two valid species, namely *Oceania armata* Kölliker, 1853 and *Oceania tydmani* Bleeker & van der Spoel, 1988.

9. Long-established usage would be severely disturbed if *Oceania* were defined according to concepts of the genus held by Lesson (1843) and Agassiz (1862), and especially so if it were considered a senior synonym of the leptothecate genus-group

name *Clytia* Lamouroux, 1812, widely used in the nomenclature of both hydroids and hydromedusae (see Cornelius, 1982; Cornelius & Östman, 1986). *Clytia* polyps and medusae are very common hydrozoans worldwide, and the name *Clytia* has been used regularly in influential synopses (e.g. Hincks, 1868; Nutting, 1915; Fraser, 1944; Millard, 1975; Calder, 1991; Cornelius, 1995). Replacing *Clytia* by *Oceania* would certainly cause much confusion.

10. Article 69.2.2 allows for the designation of a nominal species not originally included in the genus as the type species only if it is considered to be a synonym of one of the originally included nominal species. In the interest of stability the Commission is asked to use its plenary power and set aside the restriction of this article as well as all other fixations of type species prior to that by Mayer (1910) and rule that the nominal species *Oceania armata* Kölliker, 1853 is the type species of the nominal genus *Oceania* Péron & Lesueur, 1810.

11. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous fixations of type species for the nominal genus *Oceania* Péron & Lesueur, 1810 before the designation by Mayer (1910) of *Oceania armata* Kölliker, 1853 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the name *Oceania* Péron & Lesueur, 1810 (gender: feminine), type species by subsequent designation by Mayer (1910) *Oceania armata* Kölliker, 1853 as ruled in (1) above;
- (3) to place on the Official List of Specific Names in Zoology the name *armata* Kölliker, 1853, as published in the binomen *Oceania armata* (specific name of the type species of *Oceania* Péron & Lesueur, 1810).

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### References

- Agassiz, L. 1862. *Contributions to the Natural History of the United States of America*, vol. IV. 380 pp., 19 pls. Little Brown, Boston.
- Bleeker, J. & van der Spoel, S. 1988. Medusae of the Amsterdam Mid North Atlantic Plankton Expeditions (1980–1983) with description of two new species. *Bijdragen tot de Dierkunde*, **58**: 227–258.
- Boero, F. & Bouillon, J. 1993. Zoogeography and life cycle patterns of Mediterranean hydromedusae (Cnidaria). *Biological Journal of the Linnean Society*, **48**: 239–266.
- Bouillon, J. 1985. Essai de classification des hydropolypes-hydroméduses (Hydrozoa-Cnidaria). *Indo-Malayan Zoology*, **2**: 29–243.
- Bouillon, J. 1995. Hydromedusae of the New Zealand Oceanographic Institute (Hydrozoa, Cnidaria). *New Zealand Journal of Zoology*, **22**: 223–238.
- Bouillon, J. & Boero, F. 2000. Synopsis of the families and genera of the Hydromedusae of the world, with a list of the worldwide species. *Thalassia Salentina*, **24**: 47–296.
- Brinckmann-Voss, A. 1970. Anthomedusae/Athecata (Hydrozoa, Cnidaria) of the Mediterranean. Part I. Capitata. *Fauna e Flora Golfo di Napoli*, **39**: 1–96.
- Calder, D.R. 1988. *Turritopsoides brehmeri*, a new genus and species of athecate hydroid from Belize (Hydrozoa: Clavidae). *Proceedings of the Biological Society of Washington*, **101**: 229–233.
- Calder, D.R. 1991. Shallow-water hydroids of Bermuda: the Thecatae, exclusive of Plumularioidea. *Royal Ontario Museum Life Sciences Contributions*, **154**: 1–140.

- Cornelius, P.F.S.** 1982. Hydroids and medusae of the family Campanulariidae, recorded from the eastern north Atlantic, with a world synopsis of genera. *Bulletin of the British Museum, Zoology*, **42**: 37–148.
- Cornelius, P.F.S.** 1995. North-west European thecate hydroids and their medusae. Part 1. Introduction, Laodiceidae to Haleciidae. Pp. 1–347. Part 2. Sertulariidae to Campanulariidae. Pp. 1–386. *Synopses of the British Fauna New Series*, no. 50. Field Studies Council for Linnean Society of London and Estuarine and Coastal Sciences Association, Shrewsbury.
- Cornelius, P.F.S. & Östman, C.** 1986. On the names of two species of the genus *Clytia* Lamouroux, 1812 (Cnidaria, Hydrozoa) common in western Europe. *Bulletin of Zoological Nomenclature*, **43**: 163–169.
- Eschscholtz, F.** 1829. *System der Acalephen. Eine ausführliche Beschreibung aller medusenartigen Strahlthiere*. 190 pp. Ferdinand Dümmler, Berlin.
- Forbes, E.** 1848. *A monograph of the British naked-eyed medusae: with figures of all the species*. 104 pp., 13 pls. Ray Society, London.
- Forskål, P.** 1775. *Descriptiones animalium avium, amphibiorum, piscium, insectorum, vermium; quae in itinere orientali observavit Petrus Forskål*. 164 pp. Ex officina Mölleri, Hauniae.
- Fraser, C.M.** 1944. *Hydroids of the Atlantic coast of North America*. 451 pp., 94 pls. University of Toronto Press, Toronto.
- Gegenbaur, C.** 1854. Zur Lehre vom Generationswechsel und der Fortpflanzung bei Medusen und Polypen. *Verhandlungen der Physikalisch-Medizinischen Gesellschaft zu Würzburg*, **4**: 154–221.
- Gegenbaur, C.** 1856. Versuch eines Systems der Medusen, mit Beschreibung neuer oder wenig gekannter Formen; zugleich ein Beitrag zur Kenntnis der Fauna des Mittelmeeres. *Zeitschrift für wissenschaftliche Zoologie, Leipzig*, **8**: 202–273.
- Goy, J.** 1995. *Les méduses de François Péron et Charles-Alexandre Lesueur. Un autre regard sur l'expédition Baudin*. 392 pp. Ministère de l'enseignement supérieur et de la recherche. Comité des travaux historiques et scientifiques, Paris.
- Haeckel, E.** 1879. Das System der Medusen. Erster Teil einer Monographie der Medusen. *Denkschriften der Medicinisch-Naturwissenschaftlichen Gesellschaft zu Jena*, **1**: 1–360.
- Hincks, T.** 1868. *A history of the British hydroid zoophytes*, vol. 1, lxvii, 338 pp., vol. 2, 67 pls. John van Voorst, London.
- Kölliker, A.** 1853. In Gegenbaur, C., Kölliker, A. & Müller, H. Bericht über einige im Herbste 1852 angestellte vergleichend-anatomische Untersuchungen. *Zeitschrift für wissenschaftliche Zoologie*, **4**: 299–370.
- Kramp, P.L.** 1959. The Hydromedusae of the Atlantic Ocean and adjacent waters. *Dana Report*, **46**: 1–283.
- Kramp, P.L.** 1961. Synopsis of the medusae of the world. *Journal of the Marine Biological Association of the U.K.*, **40**: 1–469.
- Kramp, P.L.** 1965. The Hydromedusae of the Pacific and Indian Oceans. *Dana Report*, **63**: 1–162.
- Kramp, P.L.** 1968. The Hydromedusae of the Pacific and Indian Oceans. Sections II & III. *Dana Report*, **72**: 1–200.
- Lesson, R.P.** 1843. *Histoire naturelle des zoophytes. Acalèphes*. 596 pp. Librairie Encyclopédique de Roret, Paris.
- Mayer, A.G.** 1910. *Medusae of the world. Hydromedusae*, vols. I & II. *Scyphomedusae*, vol. III. 735 pp. Carnegie Institution, Washington.
- Metschnikoff, E.** 1886. *Embryologische Studien an Medusen. Ein Beitrag zur Genealogie der Primitiv-Organen*. 159 pp., 12 pls. Alfred Hölder, Wien.
- Millard, N.A.H.** 1975. Monograph on the Hydrozoa of southern Africa. *Annals of the South African Museum*, **68**: 1–513.
- Nutting, C.** 1915. American hydroids. Part III, the Campanularidae and the Bonneviellidae. *United States National Museum Special Bulletin*, **4**: 1–126.
- Péron, F. & Lesueur, C.A.** 1810. Tableau des caractères génériques et spécifiques de toutes les espèces de méduses connues jusqu'à ce jour. *Annales du Muséum national d'histoire naturelle de Paris*, **14**: 325–366.

- Picard, J.** 1958. Origines et affinités de la faune d'hydropolypes (Gymnoblastes et Calyptoblastes) et d'hydroméduses (Anthoméduses et Leptoméduses) de la Méditerranée. *Rapports et procès verbaux des Réunions de la Commission Internationale pour l'Exploration Scientifique de la Mer Méditerranée Monaco*, **14**: 187–199.
- Ranson, G.** 1925. Quelques observations sur le plancton et liste des méduses recueillis par La Tanche pendant sa croisière de 1924. *Bulletin du Muséum national d'histoire naturelle, Paris*, **31**: 379–382.
- Schuchert, P.** 1996. The marine fauna of New Zealand: athecate hydroids and their medusae (Cnidaria: Hydrozoa). *New Zealand Oceanographic Institute Memoir*, **106**: 1–159.
- Schuchert, P.** 2004. Revision of the European athecate hydroids and their medusae (Hydrozoa, Cnidaria): Families Oceanidae and Pachycordylidae. *Revue Suisse de Zoologie*, **111**: 315–369.
- Trégouboff, G. & Rose, M.** 1957. *Manuel de planctonologie méditerranéenne*. Volumes I & II. Editions du Centre National de la Recherche Scientifique, Paris.
- Uchida, T.** 1927. Studies on Japanese hydromedusae. I. Anthomedusae. *Journal of the Faculty of Science, Imperial University of Tokyo, Section IV, Zoology*, **1**: 145–241.
- Vanhöffen, E.** 1891. Versuch einer natürlichen Gruppierung der Anthomedusen. *Zoologischer Anzeiger*, **14**: 439–446.

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